Grades 6-8

"Intertidal Monitoring"

Students will participate in hands-on monitoring projects in shallow reef areas. Areas to be used will only require getting the feet wet. Please call for more information.

"Life and Times of the Humpback Whales"

How do the Scientists study the whales? Students will participate in activities to explore how scientists conduct research and what they are learning.

"Remote Control Boat Monitoring"

Students will use remote controlled boats with cameras attached to monitor different ecosystems. Data collection will be supported by the "Digital Bus Project." Please call for more information on this exciting project.

"Agricultural Engineers"

Kōʻieʻie Fishpond has seen changes in its surrounding environment for years.

Students will integrate these physical changes into a fishpond model that they build and develop their own theories.



"Assess Kō'ie'ie Loko I'a"

The students will investigate different elements of a fishpond including the ahupua'a, life within the pond, and the pond's structure.

"Kākau Mo'olelo"

(Hawaiian Story Composition)

The students will identify different characters found within an ahupua'a and will be given an opportunity to write a short story about their specific area of this traditional land division.

Grades 9-12:

"Researching the Humpback Whales"

Students will be introduced to whale research techniques: fluke identification, and genetic sampling.

"Intertidal Monitoring Programs"

The Sanctuary has new exciting programs for high school students. We have developed monitoring



protocols for students to use to collect data on intertidal areas (students will only get their feet wet), and/or remote control boats with cameras attached for deep water monitoring. We have structured projects in place or you and your students may come up with their own questions/projects that they would like to research. Data collection will be supported by the "Digital Bus Project." Call for more information.

"Pehea ke Kai?"

(How's the Ocean?)

Have you checked your water lately? Life in the fishpond is dependent upon the quality of water and participants will use water quality tests to determine the health of the immediate ocean's waters.

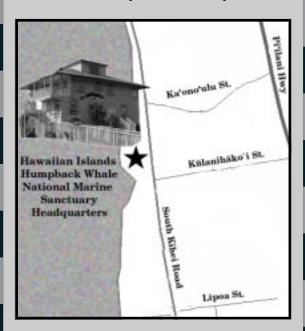
"Nā Mea Kanu 'Āina a i Kai"

(*Plants of the Land and Sea*)

The land and sea are dependent upon each other and this is evident in the plants. High school students will have a tour of the native plants found along our shores and their relationship to those in the ocean, highlighting their Native Hawaiian uses.

The Hawaiian Islands Humpback Whale
National Marine Sanctuary's
Education Center
is open to the public
Monday through Friday
from 10:00 a.m. to 3:00 p.m.
It is free!

School group sessions are scheduled by appointment. Contact Jerry Stowell at 879-2818 to reserve your date today!



726 S. Kīhei Road Kīhei, Hawai'i 96753

(808) 879-2818 phone (808) 874-3815 fax

http://hawaiihumpbackwhale.noaa.gov



Sanctuary Discoveries 2004 - 2005



FREE EDUCATION CLASSES





NOAA Ocean Service

The Hawaiian Islands Humpback Whale National Marine Sanctuary offers FREE Educational Programs!

Classes will include a variety of activities; lectures, creative hands-on activities and in the field experiences. The content will also address grade level standards.

<u>Teachers</u>: you can "mix and match" grade level topics or participate in a longer, more involved lesson on one topic. Please note that 6th grades may choose from two different categories.

To Schedule Your Class: Please call Jerry Stowell, at 879-2818, to discuss options and schedule your visit. Detailed information about each class and standards to be addressed are available upon request.

Grades K-1

"BIG Whales"

How big is a humpback whale? Students will learn about the whales through movement, songs and crafts.



"BIG Fish"

Students will explore fish shapes and movement through games and craft activities.

"Nā Holoholona o ke Kai"

(The Animals of the Sea)

Kids will have a fun time learning about nā holoholona o ke kai as they view a fun storyboard with bright creatures of the sea and learn the Hawaiiian names of these animals.

Grades 2-3

"Whale Tales"

Students will participate in active games and art/writing activities to learn about the biology and behaviors of the humpback whales.

"Critter Connections"

Survival in the reefs....
everyone has a purpose
for being there. Students
will participate in a variety of
games to learn about reef food webs
and connections.

"Turtle Tracks"

Turtles nest and hatch on our Maui beaches. We don't see them again till they are full grown. Where do they go? Students will examine the life cycle of the sea turtles.

"Marine Art 1"

Marine content will be the focus of a creative art project. Teachers may pick the subject matter: reef, fish or turtles and we will incorporate the content into the art project.

"Fish Tales"

Why do some fish have stripes and whiskers? Students will explore adaptations by creating fish and their habitats.

"The Legend of Makoa"

The students will be taken back into time, during the days of Kamehameha. They'll listen to a legend about his trustee messenger Makoa who ran switfly across the islands then reenact his journey with a fun race along our shoreline!

Grades 4-6

"Da Whales"

What is the difference between a whale and a fish? Students will also examine whale behaviors and will learn how to recognize one whale from another.

"Life in the Coral Reef"

Many different species live in coral reefs. Students will explore how all these different organisms are connected, special adaptations they have and how they each play a unique role in the ecosystem.

"Hawai'i's Marine Protected Species"

What declares something to be a protected species? The humpback whales, monk seals, sea turtles and spinner dolphins are all protected species in Hawai'i. Students learn how and why these animals are protected.

"Salt Water Investigations"

Why is the ocean salty? Students will investigate the properties of salt water.

"Marine Art 2"

Marine content will be the focus of a creative art project. Teachers may pick the subject matter and we will incorporate the content into the art project.

Grades 4-6 continued

"Lessons in Limu"

Limu plays a key role in the marine ecosystem. Students will collect limu, identify it using scientific keys, and use it in a art project.

"Squid Squishes"

Students will learn about the characteristics of cephalopods as they dissect squid.



"E Kūkulu i nā Loko I'a Kahiko"

(Let's build an ancient Hawaiian Fishpond)
The entire class will learn about different loko i'a (fishponds) and have a chance to build models that can be taken back and used in the classroom.

"Draw Your Own Ahupua'a"

An ahupua'a was a traditional land division used by Hawaiians to regulate their resources and kept order in the community. The students will learn about its various areas and drawn specific characteristics of an ahupua'a.

"Kō'ie'ie Loko I'a of the Past"

Using their imagination, the students will hear about Kōʻieʻie Fishpond's history and draw their interpretation of how life was in the past around the fishpond.